

INTERNATIONAL SEARCH REPORT

International Application No
PCT/JP2004/013281

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01L21/68 H01L21/52 H01L21/78 B23Q11/00 B23D59/00
H05K13/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B23Q B23D H01L H05K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 778 326 A (ALTHOUSE ET AL) 18 October 1988 (1988-10-18) column 3, line 9 - column 7, line 2; figures 1-4	1-16
X	US 4 921 564 A (MOORE ET AL) 1 May 1990 (1990-05-01) column 5, line 23 - column 3, line 12; figures 2,3	1-16
X	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 10, 17 November 2000 (2000-11-17) & JP 2000 195877 A (MATSUSHITA ELECTRIC IND CO LTD), 14 July 2000 (2000-07-14) abstract; figure 2	1-16
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- *O* document referring to an oral disclosure, use, exhibition or other means
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- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the International search

22 February 2005

Date of mailing of the International search report

02/03/2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 018, no. 299 (E-1558), 8 June 1994 (1994-06-08) -& JP 06 061347 A (FUJITSU LTD), 4 March 1994 (1994-03-04) abstract; figure 1 -----	1-16
A	PATENT ABSTRACTS OF JAPAN vol. 017, no. 657 (E-1470), 6 December 1993 (1993-12-06) & JP 05 218178 A (FUJITSU LTD), 27 August 1993 (1993-08-27) abstract; figures 4,5 -----	1-16

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Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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			JP 2041907 B	19-09-1990
			JP 59227195 A	20-12-1984
US 4921564	A	01-05-1990	GB 2219135 A , B	29-11-1989
			JP 1822603 C	10-02-1994
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JP 2000195877	A	14-07-2000	NONE	
JP 06061347	A	04-03-1994	NONE	
JP 05218178	A	27-08-1993	NONE	